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MOUNTAIN PINE BEETLE INFESTATION
ON PUBLIC AND PRIVATE LANDS IN MONTANA
AERIAL RECONNAISSANCE
1954

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A number of mountain pine beetle outbreaks have been observed in lodgepole pine stands during the summer while making aerial surveys of bark beetle infested spruce timber type. This report will summarize the observation made on several flights on the Flathead and Kootenai Forests, and in parts of Glacier National Park.

During July mountain pine beetle infestations were observed in the Flathead Forest in lower Whale Creek and near Spotted Bear Ranger Station. In the Kootenai Forest, where considerable private ownership is involved, mountain pine beetle infestation was observed in Lost Prairie Creek (two areas), Thompson Lakes, and Lazier Creek. In Glacier National Park outbreaks were observed on Starvation Ridge and near the mouth of Bowman Creek. These observations have been described in previous reports.^{1/}

Subsequent surveys have disclosed additional areas of mountain pine beetle infestation on the Flathead Forest and in Glacier National Park.

The following list will give a more complete description of the infested areas, the approximate acreage and location.

FLATHEAD NATIONAL FOREST

Whale Creek. 3,700 acres. Parts of Sections 10, 11, 12, 13, 14, 15, 16, 21, 22, and 23. T. 36 N., R. 22 W. in the vicinity of lower Whale Creek and Tepee Lake.

There are numerous large groups. It has the appearance of a heavy infestation.

^{1/} Mountain pine beetle outbreak, Flathead National Forest and Glacier National Park, July 1954, T. T. Terrell.

Mountain pine beetle outbreak, Kootenai National Forest.

Dudley Creek. 2,300 acres. Located in Sections 30, 31, T. 30 N., R. 17 and 18 W. Sections 1, 6, 12, 7, 17, and 18, T. 29 N., R. 17 and 18 W., along the northeastern side of Hungry Horse Reservoir. From evidence of old kill observed it is thought that this infestation has been active for several years. The type is white pine, lodgepole pine and larch. The red topped trees are evenly distributed with little evidence of grouping. They occur in both white pine and lodgepole pine. The infestation appears to be moderate.

Spotted Bear. 2,000 acres. This area which was previously estimated at 400 acres was found on a more thorough inspection to cover considerably more area. It is located in Sections 16, 17, 19, 20, 21, 28, 29, T. 25 N., R. 15 W. South of Spotted Bear Ranger Station. This area includes lodgepole pine type on both sides of the river, but the heaviest infestation is confined to about 300 acres in the center of Section 21. There are a number of large groups of red topped trees. It has the appearance of a heavy infestation.

South Fork River. 1,300 acres. This is an area of smaller type and lies just south along both sides of the river, from the Spotted Bear area and includes parts of Sections 34 and 35, T. 26 N., R. 15 W. Sections 1 and most of 6 in T. 25 N., R. 14 and 15 W. The infestation occurs in groups of from 10 to 15 trees. The infestation appears to be somewhat lighter than that noted above.

Bent Creek. 3,200 acres. The Bent Creek area includes a large part of the lower Bent Creek drainage and extends from Webb Lake to the Spotted Bear River. The sections included are: 27, 34, 35, 36, T. 26 N., R. 15 W., 1, 2, 3, 10, 11, and 12, T. 25 N., R. 15 W. and part of 7 and 18 in R. 14 W. There are scattered small groups of infested trees which indicate a light to moderately infested area.

Dean Ridge. 2,000 acres. This area lies between Spotted Bear River and Dean Ridge in the vicinity of Blue Lakes. It includes parts of Sections 8, 16, 17, 18, 20, and 21, T. 25 N., R. 13 W. It has what appears to be a light infestation with scattered red tops throughout the stand.

Granite Creek. 4,000 acres. Granite Creek is tributary to the Middle Fork of the Flathead River. The infestation appears to extend from the head of the drainage to a point about three miles below the Challenge Creek Cabin. The sections included are: 24, 25, 26, and 36, T. 29 N., R. 14 W., Sections 2, 3, 10, 11, 14, and 15, T. 28 N., R. 14 W. There appeared to be an excellent stand of lodgepole pine in this drainage that would be quite accessible through a low pass from Skyland Creek. The infestation is thought to be moderate to light in the northern end of the area but quite heavy in the south. There were some rather large groups of red topped trees especially in Sections 11 and 14.

Skyland Creek. 700 acres. In parts of Section 9 and 10, T. 29 N., R. 14 W. scattered fading trees were observed along the ridge above the jeep road. There is some question as to whether the apparent damage was caused by bark beetles or not. Their distribution and appearance do not have quite the characteristics of bark beetle damage. A ground check will be made later. If these fading and red trees have been caused by bark beetles it would be classed as a comparatively light infestation.

KOOTENAI NATIONAL FOREST

The only change from the report previously made on the mountain pine beetle infestation in the Kootenai area is a refinement of acreage. These refinements were made by subsequent aerial observations.

Lost Prairie Creek. 2,200 acres. There are two areas of infestation in this drainage - one in the head of Lost Prairie Creek which includes parts of Sections 20, 21, 22, 26, 27, 28 and 29, T. 27 N., R. 25 W., an area of about 1,500 acres. In an unnamed Fork in the northern part of the same township there is an area of infestation of about 700 acres that includes parts of Sections 9, 10, 14, 15, and T. 27 N., R. 25 W. There are large patches of what appears to be the work of secondary insects in these two areas but there are also groups of red tops in the larger trees that were undoubtedly killed by the mountain pine beetle. The larger of the two areas was a part of a former control area.

Davis Creek. 600 acres. There are two small areas of infested type along the southern side of the Thompson Lakes in Sections 31, T. 27 N., Sections 4, 5, and 6, T. 26 N., R. 27 W. One of these areas is in Section 4 and has a large area of small red topped trees that may be caused by water damage. West of the Metcalf road several groups of red and fading trees were observed in a marshy area. This is felt to be a light infestation which has persisted for a number of years. Control was once considered here but was dropped because of the poor characteristics of the infestation.

Lazier Creek. 900 acres. There are three areas with a number of groups of red topped trees and scattered single red trees. This former control area includes parts of Sections 29, 30, 31, T. 25 N., R. 27 W., and extends into Sections 1 and 2 in the next township south. The infestation is quite heavy, especially so south of the road.

Indian and Whitney Creeks. 300 acres. Three widely separated spots of infestation were observed - one approximately on the section line

between 9 and 10 near the south corner; one just north of the road in Section 17, and one in Section 19, all in T. 25 N., R. 27 W. This would be considered a light infestation.

GLACIER NATIONAL PARK

No further observation was made of the previously reported infestations near Kintla Lake or Bowman Creek. They are included in this report to complete the list.

Kintla Lake Area. 700 acres. The infested area lies north of Kintla Lake and extends nearly to the top of Starvation Ridge. It includes parts of Sections 15, 16, 20, 21 and 29, T. 37 N., R. 21 W. It is very heavily infested.

Bowman Creek. 300 acres. Located in Sections 14 and 15, T. 35 N., R. 21 W. The infestation extends along Bowman Creek on the north side for a distance of about one and one-half miles above the mouth of the creek. The area is from 20 to 30 chains wide. There are several groups of infested trees.

Park Creek. 900 acres. The area of infestation is almost entirely in Sections 19 and 20, T. 30 N., R. 15 W., at the base of Salvage Mountain. This is a very heavy infestation with groups of a hundred or more red topped trees.

During the course of these observations a very large portion of the lodgepole pine type within the vicinity of the areas mentioned were also covered. In some instances, however, especially in Glacier Park and in the Shafer district of the Flathead National Forest, there are doubtless areas of lodgepole pine where no observations have been made. Other areas such as those near Spotted Bear on the Flathead Forest and in the vicinity of the Thompson Lakes, Pleasant Valley and Indian Creek, McGinnis and Elk Creek on the Kootenai were fairly well covered. Areas south of the Bend Guard Station were not covered except for a flight, described in a previous report, down the Thompson River. Flights were made through the drainages east of Thompson River - Flathead Divide and in the head of the Little Thompson River. No evidence of infestation was seen in these areas.